

REMARKS

This Amendment and the following remarks are fully and completely responsive to the Office Action dated October 4, 2005. Claims 1-8 and 12-20 are pending in this application with claims 1, 12, 17, 19 and 20 amended. In the outstanding Office Action claims 1, 4-6, 8, 12, 14-19 and 20 were rejected under 35 U.S.C. § 102(b) (two different rejections) and claims 2, 3, 7 and 13 were rejected under 35 U.S.C. § 103(a) (two different rejections). No new matter has been added. Claims 1-8 and 12-20 are presented for reconsideration.

35 U.S.C. 102(b) and 103(a)

Claims 1, 4-6, 8, 19 and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sha et al. (U.S. Patent No. 6,404,294, "Sha").

In making this rejection, the Office Action asserts that this reference teaches each and every element of the claimed invention. Applicants disagree and request reconsideration of this rejection.

Claims 12 and 14-18 were rejected under 35 U.S.C. § 102(b) as being anticipated by Takla (U.S. Patent No. 5,978,425, "Takla"). In making this rejection, the Office Action asserts that this reference teaches each and every element of the claimed invention. Applicants disagree and respectfully request reconsideration of this rejection.

Claims 2, 3 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sha in view of Applicants' Admitted Prior Art as represented by Fig. 1 (AAPA). In making this rejection, the Office Action asserts that the combination of these two references teach and/or suggest the claimed invention. The Office Action also asserts

that a person of ordinary skill in the art would combine these two references. Applicants disagree and respectfully request reconsideration of this rejection.

Claim 13 was rejected under 35 U.S.C. 103(a) as being unpatentable over Takla. The Office Action asserts that this reference teaches and/or suggests the claimed invention. Applicants disagree and respectfully request reconsideration of this rejection.

Claim 1, as amended, recites in part:

...a current D/A converter fluctuating the current signal based on a digital signal for spreading spectrum; and...

Independent claims 12, 17, 19 and 20 recite similar limitations. Consequently, the currently claimed invention requires that the current signal fluctuates based on a digital signal for spreading spectrum.

In contrast, Sha teaches that the V TO I circuit 112 fluctuates the current signal based on the VCTRL signal for selecting a proper gain curve. Additionally, as shown in Fig. 8 of Sha, only one transistor 118 of the V TO I circuit fluctuates the current. Consequently, the VCO of Sha has inferior performance since the fluctuating current is influenced by the fluctuation of the transistor 118.

Similarly, Takla also fails to teach and/or suggest that the current signal is fluctuated based on a digital signal for spreading spectrum.

Consequently, neither Sha nor Takla teach and/or suggest the claimed invention. Regarding claim 1 and the claims that depend thereon, neither of these references teach and/or suggest "a current D/A converter fluctuating the current signal based on a digital signal for spreading spectrum". Regarding claim 12 and the claims dependent thereon, neither of these references teach and/or suggest a second clock generator part

generating a second clock signal, wherein the second clock generator part comprises a current D/A converter converting the current signal into variable current signals based on a digital signal for spreading spectrum and a second current controlled oscillator oscillating second clock signal of which frequency corresponds to each of the variable current signals. Regarding claim 17 and the claims dependent thereon, neither of these two references teach and/or suggest a second circuit generating a second clock signal of a frequency containing a frequency spectrum with M number of peaks (M is an integer that is greater than one, $M > N$) on the basis of a current signal generated based on a digital signal for spreading spectrum, the digital signal for spreading spectrum is based on a comparison result of comparing a standard clock signal and an operating clock signal. Regarding claim 19, neither of the cited references teach and/or suggest a current D/A converter that changes the current signal into a variable current signal based on a digital signal for spreading spectrum. Regarding claim 20, neither of these two references teach and/or suggest using a current D/A converter to change the current signal into variable current signals based on a digital control signal for spreading spectrum. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 4-6, 8, 12 and 14-20 under 35 U.S.C. § 102(b) (two different rejections) and the rejection of claims 2, 3, 7 and 13 under 35 U.S.C. § 103(a) (two different rejections).

Conclusion

Applicants' remarks have overcome the rejections set forth in the Office Action dated October 4, 2005. Specifically, Applicants' remarks have distinguished claims 1, 4-6, 8, 19 and 20 from Sha and thus overcome the rejection of these claims under 35

U.S.C. § 102(b). Applicants' remarks have also distinguished claims 12 and 14-18 from Takla and thus overcome the rejection of these claims under 35 U.S.C. § 102(b). Applicants' remarks have distinguished claims 2, 3 and 7 from the combination of Sha and AAPA and thus overcome the rejection of these claims under 35 U.S.C. § 103(a). Applicants' remarks have also distinguished claim 13 from Takla and thus overcome the rejection of this claim under 35 U.S.C. § 103(a). Accordingly, claims 1-8 and 12-20 are in condition for allowance. Therefore, Applicants respectfully request consideration and allowance of claims 1-8 and 12-20.

Applicant respectfully submits that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event this paper is not considered to be timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 100698-00014.**

Respectfully submitted,
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Enclosure: RCE Transmittal